



## DEPARTMENT OF TRANSPORTATION

### National Highway Traffic Safety Administration

[Docket No. NHTSA-2020-0117; Notice 1]

#### **Sumitomo Rubber Industries, Ltd., and Sumitomo Rubber North America, Inc., Receipt of Petition for Decision of Inconsequential Noncompliance**

**AGENCY:** National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

**ACTION:** Receipt of petition.

**SUMMARY:** Sumitomo Rubber Industries, Ltd. and Sumitomo Rubber North America, Inc. (collectively, “Sumitomo”) have determined that certain Sumitomo and Falken truck tires do not fully comply with Federal Motor Vehicle Safety Standard (FMVSS) No. 119, *New Pneumatic Tires for Motor Vehicles with a GVWR of More Than 4,536 Kilograms (10,000 Pounds) and Motorcycles*. Sumitomo filed a noncompliance report dated November 12, 2020. Sumitomo subsequently petitioned NHTSA on December 4, 2020, and later amended its petition on April 8, 2021, for a decision that the subject noncompliance is inconsequential as it relates to motor vehicle safety. This notice announces the receipt of Sumitomo’s petition.

**DATES:** Send comments on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

**ADDRESSES:** Interested persons are invited to submit written data, views, and arguments on this petition. Comments must refer to the docket and notice number cited in the title of this notice and submitted by any of the following methods:

- Mail: Send comments by mail addressed to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, S.E., Washington, DC 20590.

- Hand Delivery: Deliver comments by hand to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, S.E., Washington, DC 20590. The Docket Section is open on weekdays from 10 am to 5 pm except for Federal holidays.
- Electronically: Submit comments electronically by logging onto the Federal Docket Management System (FDMS) website at <https://www.regulations.gov/>. Follow the online instructions for submitting comments.
- Comments may also be faxed to (202) 493-2251.

Comments must be written in the English language, and be no greater than 15 pages in length, although there is no limit to the length of necessary attachments to the comments. If comments are submitted in hard copy form, please ensure that two copies are provided. If you wish to receive confirmation that the comments you have submitted by mail were received, please enclose a stamped, self-addressed postcard with the comments. Note that all comments received will be posted without change to <https://www.regulations.gov>, including any personal information provided.

All comments and supporting materials received before the close of business on the closing date indicated above will be filed in the docket and will be considered. All comments and supporting materials received after the closing date will also be filed and will be considered to the fullest extent possible.

When the petition is granted or denied, notice of the decision will also be published in the **Federal Register** pursuant to the authority indicated at the end of this notice.

All comments, background documentation, and supporting materials submitted to the docket may be viewed by anyone at the address and times given above. The documents may also be viewed on the internet at <https://www.regulations.gov> by following the online instructions for accessing the docket. The docket ID number for this petition is shown in the heading of this notice.

DOT's complete Privacy Act Statement is available for review in a Federal Register notice published on April 11, 2000 (65 FR 19477–78).

## **SUPPLEMENTARY INFORMATION:**

### **I. Overview:**

Sumitomo has determined that certain Sumitomo and Falken truck tires do not fully comply with the requirements of paragraph S6.1.2(a) of FMVSS No. 119, *New Pneumatic Tires for Motor Vehicles with a GVWR of More Than 4,536 Kilograms (10,000 Pounds) and Motorcycles* (49 CFR 571.119). Sumitomo filed a noncompliance report dated November 12, 2020, pursuant to 49 CFR part 573, *Defect and Noncompliance Responsibility and Reports*. Sumitomo subsequently petitioned NHTSA on December 4, 2020, and later amended its petition on April 8, 2021, for an exemption from the notification and remedy requirements of 49 U.S.C. Chapter 301 on the basis that this noncompliance is inconsequential as it relates to motor vehicle safety, pursuant to 49 U.S.C. 30118(d) and 30120(h) and 49 CFR part 556, *Exemption for Inconsequential Defect or Noncompliance*.

This notice of receipt of Sumitomo's petition is published under 49 U.S.C. 30118 and 30120 and does not represent any Agency decision or other exercise of judgment concerning the merits of the petition.

### **II. Tires Involved:**

Approximately 8,275 of the following Sumitomo and Falken truck and bus radial tires, manufactured between January 26, 2020, and June 2, 2020, are potentially involved:

- Sumitomo ST900 11R24.5 16PR
- Sumitomo ST528 11R24.5 16PR
- Sumitomo ST528 11R22.5 16PR
- Sumitomo ST710SE 11R22.5 144/142L
- Sumitomo ST710SE 285/75R24.5 144/141L
- Sumitomo ST710SE 11R24.5 146/143L

- Sumitomo ST788+SE 285/75R24.5 144/141L
- Sumitomo ST709SE 285/75R24.5 144/141L
- Sumitomo ST709SE 11R24.5 149/146L
- Sumitomo ST778+SE 11R24.5 149/146L
- Sumitomo ST788SE 285/75R24.5 147/144L
- Sumitomo ST948SE 11R24.5 149/146L
- Sumitomo ST908N 11R22.5 146/144L
- Sumitomo ST788SE 11R22.5 146/143L
- Sumitomo ST788SE 11R24.5 149/146L
- Sumitomo ST719SE 11R22.5 146/142L
- Sumitomo ST719SE 11R24.5 149/146L
- Sumitomo ST719SE 285/75R24.5 147/144L
- Sumitomo ST948SE 285/75R24.5 144/141L
- Sumitomo ST938 11R24.5 149/146L
- Falken RI130EC 11R22.5 146/143L
- Falken RI130EC 11R24.5 149/146L
- Falken GI388 11R24.5 149/146K
- Falken RI150EC 11R22.5 146/143L
- Falken RI130EC285/75R24.5 147/144L
- Falken RI151S 315/80R22.5 156/150L

### **III. Noncompliance:**

Sumitomo explains that the noncompliance is that the subject tires may show visual evidence of bead separation near the edge of the rim flange when tested in accordance with paragraph S7.2 of FMVSS No. 119, and therefore, do not fully meet the requirements specified in paragraph S6.1.2(a) of FMVSS No. 119. Specifically, the bead separation is due to the heat-

induced expansion caused by the misplacement of the joint tape and a change in the tape's composition.

#### **IV. Rule Requirements:**

Paragraph S6.1.2(a) of FMVSS No. 119 includes the requirements relevant to this petition. When tested in accordance with the procedures of S7.2, a tire shall exhibit no visual evidence of tread, sidewall, ply, cord, innerliner, or bead separation, chunking, broken cords, cracking, or open splices.

#### **V. Summary of Sumitomo's Petition:**

The following views and arguments presented in this section, "V. Summary of Sumitomo's Petition," are the views and arguments provided by Sumitomo. They have not been evaluated by the Agency and do not reflect the views of the Agency. Sumitomo described the subject noncompliance and contended that the noncompliance is inconsequential as it relates to motor vehicle safety.

In support of its petition, Sumitomo submitted the following reasoning:

##### **1. The Deformation in the Subject Tires Does Not Affect Structural Integrity:**

- a. As described in its noncompliance report, Sumitomo discovered that a population of truck and bus radial tires may be susceptible to developing a visible deformation in a single, small area of the bead near the upper edge of a rim flange. In an e-mail to NHTSA on March 3, 2021, Sumitomo clarified that they used the term "deformation" to refer to the visual evidence. After cutting into the tires to inspect the issue, Sumitomo could see that the deformation was the result of a "breakdown in the bond between components in the bead," so that it fell within the definition of bead separation in FMVSS No. 109 *New Pneumatic Tires for Motor Vehicles with a GVWR of More Than 4,536 kilograms (10,000 pounds) and Motorcycles*. Sumitomo states that FMVSS No. 119 does not define "bead separation," but it states that "[a]ll terms defined in the Act and the rules and

standards issued under its authority are used as defined therein.” Therefore, we looked to that term as it is defined in FMVSS No. 109. Further, Sumitomo claims, that after review the rulemaking history of FMVSS No. 119 and the definition of bead separation, Sumitomo concluded that the heat-induced expansion caused by the misplaced joint tape may technically fall within the definition of bead separation, even though it does not involve a structural weakness in the tire. Sumitomo states that its test data demonstrates that the deformation is not likely to expose an occupant of a vehicle equipped with such tires to a significantly greater risk than an occupant of a vehicle equipped with a fully compliant tire.

- b. With respect to the structure of the tire, the deformation results from two factors related to the tire’s joint tape: misplacement of the joint tape and a change in the tape’s composition that altered the rubber’s adhesiveness. Because joint tape is not a structural component of the tire, the resulting deformation is not an indication of a structural weakness in these tires. Moreover, the deformation induced by the joint tape does not affect the integrity of the adjacent components.
- c. In manufacturing tires, Sumitomo produces long strips of material that make up the innerliner. The innerliner is the inner-most component of the tire. During the tire-building process, the innerliner ends are joined together with an adhesive material (i.e., joint tape). Other components are then added on top of the inner liner. After all components are added, the built tire undergoes vulcanization (applying heat and pressure for a set period) to fully adhere the components and complete the tire-forming process. The joint tape’s purpose is simply to keep the ends of the innerliner together during the tire-building process until the assemblage is vulcanized.

- d. Due to misplacement of the joint tape and a change in the tape's composition, the subject tires may develop a visible deformation in the bead area near the edge of the rim flange.
- e. The tire's bead core (made of several layers of steel cord bundled closely together) is enveloped by a separate layer of steel cords. The deformation is the separation between the joint strip rubber and the rubber chafer (which serves as the outer layer of the tire). The deformation occurs outside the structural components of the tire (i.e., it forms to the right of the filler cord).
- f. The deformation forms due to a lack of adhesion between the joint tape and components in the bead area, which can increase the percentage of butyl rubber content in this area. The increased butyl rubber content makes the material more susceptible to heat expansion and, combined with the lack of adhesion in the joint tape, the small area becomes susceptible to separations. Because the joint tape terminates in the bead area, the deformation will only occur there. The steel filler cords next to this area contain the deformation and prevent it from propagating beyond the specified area. Sumitomo's testing demonstrates that this deformation does not indicate, and will not subsequently cause, a structural weakness that could lead to a tire failure or rapid air loss.
- g. Sumitomo conducted a series of three tests to confirm the structural integrity of the subject tires. In one test (Test 1), SUMITOMO tested a tire returned by a Japanese customer due to the appearance of a deformation near the bead. The returned tire was a Dunlop 275/80R22.5 SP680 that the customer used for an unknown number of miles. For this test, Sumitomo inflated the tire to 100% of the JATMA-recommended inflation pressure for its maximum load (900 kPa or approximately 130 psi) and loaded the tire to 100% of its maximum load-carrying capacity (3,450 kg). Sumitomo ran the tire on a test drum at 80 km/h for 1,250

hours (approximately 100,000 km or just over 62,000 miles). The deformation near the bead did not expand (it measured 40 mm before the test and 40 mm after the test) or cause air loss, and the tire did not otherwise fail during the testing.

For the second test (Test 2), Sumitomo manufactured a test tire using intentionally misplaced joint tape composed of the same material as the tires listed in the noncompliance report. Test 2 seeks to take the tire to failure while it is underinflated (at 67% of the recommended inflation pressure) and overloaded (at 120% of the tire's maximum load-carrying capacity). As of the filing of this petition, the tire has completed three of the four test phases. In Phase One, Sumitomo ran the tire on the test drum at 50 km/h for 520 hours. In Phase Two, Sumitomo increased the speed to 60 km/h and ran the tire for 285 hours. In Phase Three, Sumitomo increased the speed to 65 km/h and ran the tire for 190 hours. The tire developed a deformation as expected. Despite being underinflated and overloaded, the tire deformation did not cause air loss or otherwise cause the tire to fail. Since submitting the initial petition, Sumitomo has completed additional testing: Phases Four and Five of Test 2, which were run at 70 km/h and 80 km/h respectively. Sumitomo stated that the results of Phases 4 and 5 were consistent with the previous phases of testing: "No air leak or structural damage". The full results of Test Two, Sumitomo's complete petition and all supporting documents, are available by logging onto the FDMS website at: <https://www.regulations.gov> and by following the online search instructions to locate the docket number as listed in the title of this notice. Sumitomo contends that the test results provide further support for its position that the deformation and "bead separation" caused by the misplaced joint tape is not indicative of a structural weakness, and, therefore, that the noncompliance is inconsequential to motor vehicle safety..



In a third test (Test 3), Sumitomo manufactured two tires (Dunlop 295/80R22.5 SP128A) with intentionally misplaced joint tape to test the tires in three severely overloaded conditions. During the testing, the tires developed deformations, as expected, near the bead in the area where the misplaced joint tape was applied. In the most extreme condition (loaded to 300% of the tire's maximum load-carrying capacity), the tires also developed a surface crack in the area of the misplaced joint tape. But even in these unrealistically severe conditions, the tire did not develop air leaks or otherwise structurally fail.

- h. In addition to these three tests, Sumitomo also manufactured four test tires (two for each) with misplaced joint tape to conduct the endurance tests in FMVSS No. 119 and UNECE R54. In both tests, the tires developed deformations, but otherwise met the substantive performance requirements.

## **2. Conclusion:**

- a. Sumitomo claims that its testing demonstrates that the deformations that may form due to the misplaced joint tape are not indicative of a structural weakness and will not cause air loss.
- b. Sumitomo says that the tires maintain their structural integrity and air pressure and otherwise meet all of the labeling and performance requirements of FMVSS No. 119.
- c. Moreover, Sumitomo is not aware of any tire failures, air loss, crashes, or injuries related to this issue.

Sumitomo concludes that the subject noncompliance is inconsequential as it relates to motor vehicle safety, and that its petition to be exempted from providing notification of the noncompliance, as required by 49 U.S.C. 30118, and a remedy for the noncompliance, as required by 49 U.S.C. 30120, should be granted.

NHTSA notes that the statutory provisions (49 U.S.C. 30118(d) and 30120(h)) that permit manufacturers to file petitions for a determination of inconsequentiality allow NHTSA to exempt manufacturers only from the duties found in sections 30118 and 30120, respectively, to notify owners, purchasers, and dealers of a defect or noncompliance and to remedy the defect or noncompliance. Therefore, any decision on this petition only applies to the subject vehicles that Sumitomo no longer controlled at the time it determined that the noncompliance existed. However, any decision on this petition does not relieve equipment distributors and dealers of the prohibitions on the sale, offer for sale, or introduction or delivery for introduction into interstate commerce of the noncompliant tires under their control after Sumitomo notified them that the subject noncompliance existed.

(Authority: 49 U.S.C. 30118, 30120; delegations of authority at 49 CFR 1.95 and 501.8)

**Otto G. Matheke III,**

*Director, Office of Vehicle Safety Compliance.*

[FR Doc. 2021-22080 Filed: 10/8/2021 8:45 am; Publication Date: 10/12/2021]